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10/596,513	12/20/2007	Torben Melsen	P18557US1	7479
27045	7590	06/23/2010	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			HARLEY, JASON A	
			ART UNIT	PAPER NUMBER
			2468	
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			06/23/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

kara.coffman@ericsson.com
jennifer.hardin@ericsson.com
melissa.rhea@ericsson.com

Office Action Summary	Application No. 10/596,513	Applicant(s) MELSEN, TORBEN	
	Examiner Jason Harley	Art Unit 2468	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to the application filed on 4/10/10 in which claims 1-18 are presented for example.

Response to Arguments

1. Applicant's arguments filed have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4, 10, 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Owens et al. U.S. PG Pub No. (2003/0039244).

As to claim 1, Owens teaches an Ethernet Digital Subscriber Line Access Multiplexer (DSLAM) for providing dynamic service selection and end-user configuration of service bindings in a digital communication system, said Ethernet DSLAM comprising: means for receiving login credentials and a service request from an end-user device; means for

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authenticating the login credentials through an authentication server; means for receiving from the authentication server (Owens, par 0050, 0051). The paragraph shows a point to point protocol Ethernet network using DSLAM to provide a service having a means for receiving a user identifier or passwords through a server for authentication.

Owens show a plurality of attributes for configuring the Ethernet DSLAM to provide a service binding corresponding to the requested service, said attributes including an identification of an access network for the requested service, and an identification of a Permanent Virtual Circuit (PVC) on a local DSL loop associated with the end-user device (par 0005, 0006, 0047). The paragraphs show identifying a user's identification of a local area network and PVC on DSL.

Owens also show means for training a bridging network terminal (NT) having a plurality of PVCs to utilize the identified PVC for sending upstream traffic from the end-user terminal to the Ethernet DSLAM, said training means including means for sending initial downstream traffic from the Ethernet DSLAM to the end-user device utilizing the identified PVC (par 0006, 0012-0017, 0040). The paragraphs show bridging a terminal to PVCs to utilize upstream and downstream traffic.

As to claim 4, Owens conveys the Ethernet DSLAM of claim 1, wherein the means for authenticating includes a RADIUS client that communicates with an external RADIUS authentication server (Owens, par 0047, 0048). The paragraph shows the

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authentication servers use Radius for communication which use shown to separate or as a single server.

As to claim 10, Claim 10 is a claim to a method to carry out the DSLAM of claim 1.

Therefore claim 10 is rejected under the same rationale set forth in claim 1.

As to claim 13, Claim 13 is a claim to a method to carry out the DSLAM of claim 4.

Therefore claim 13 is rejected under the same rationale set forth in claim 4.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 5-9, 11, 12, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al. U.S. PG Pub No. (2003/0039244) in view of Holmgren et al. U.S. Patent No. (7,277,442).

As to claim 2, Owens describes the Ethernet DSLAM of claim 1, wherein the end-user device has a Media Access Control (MAC) address (par 0052). Owens show where the device has a MAC address using DSLAM, and Owens fails to show the requested

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service is accessed through a Service Virtual Local Area Network (S-VLAN), and the Ethernet DSLAM includes means for mapping the S-VLAN for the requested service to the MAC address for the end-user device.

In analogous art Holmgren show the requested service is accessed through a Service Virtual Local Area Network (S-VLAN), and the Ethernet includes means for mapping the S-VLAN for the requested service to the address for the end-user device (Holmgren, col 1, ln 6-9, col 4, ln 39-50, col 5, ln 45-50). It is shown where a service is accessed through an S-VLAN and where the Ethernet network includes mapping a service to an address.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Owens and Holmgren because a way of conserving mapping assignments for internetworking Ethernet and ATM networks by mapping VLAN identifiers to PVCs.

As to claim 3, Owens presents the Ethernet DSLAM of claim 1, wherein the means for receiving login credentials and a service request from an end-user device includes an Ethernet DSLAM (par 0051). The paragraph shows a point to point protocol Ethernet network using DSLAM. Owens fails to show User Virtual Local Area Network (U-VLAN) through which the Ethernet communicates with the end-user device, and the requested service is accessed through a Service Virtual Local Area Network (S-VLAN), and the Ethernet DSLAM includes means for mapping the S-VLAN for the requested service to

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the U-VLAN for the end- user device.

In an analogous art Holmgren show User Virtual Local Area Network (U-VLAN) through which the Ethernet communicates with the end-user device, and the requested service is accessed through a Service Virtual Local Area Network (S-VLAN), and the Ethernet DSLAM includes means for mapping the S-VLAN for the requested service to the U-VLAN for the end- user device (Holmgren, col 5, ln 39-55). The column shows a customer VLAN which the Ethernet communicates with to map SVLAN to the customer VLAN.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Owens and Holmgren because a way of conserving mapping assignments for internetworking Ethernet and ATM networks by mapping VLAN identifiers to PVCs.

As to claim 5, Owens illustrates an Ethernet Digital Subscriber Line Access Multiplexer (DSLAM) or providing dynamic service selection and end-user configuration of service bindings in a digital communication system, said Ethernet DSLAM comprising: a plurality of subscriber ports for receiving login credentials and service requests from end-user devices, and for communicating data traffic to and from the end-user devices, wherein an identified subscriber port communicates with an identified end-user device (Owens, par 0049-0051). The paragraph shows a point to point protocol Ethernet

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network using DSLAM to provide a service having a means for receiving a user identifier or passwords through a server for authentication.

Owens show a RADIUS client that sends login credentials and a service request from the identified end-user device to an external RADIUS server for authentication and receives from the external RADIUS server, a plurality of attributes for configuring the Ethernet DSLAM to provide a service binding corresponding to the requested service, and an identification of a Permanent Virtual Circuit (PVC) on a local DSL loop associated with the end-user device a Service Selection Controller that receives the attributes from the RADIUS client (par 0005, 0006, 0044, 0049, 0051). From the applicant's specification the service selection controller is located inside the DSLAM. The paragraph shows the authentication servers use Radius for communication and configuring and communicating with an Ethernet DSLAM to provide identification for PVCs on DSL.

Owens fails to show a traffic mapper that maps data traffic between a plurality of Service Virtual Local Area Networks (S-VLANs) and the subscriber ports; said attributes including an identification of an S-VLAN through which the requested service is accessed and sends mapping control information to the traffic mapper, thereby enabling the traffic mapper to establish a service binding between the identified end-user device and the S-VLAN through which the requested service is accessed.

In an analogous art Holmgren show a traffic mapper that maps data traffic between a plurality of Service Virtual Local Area Networks (S-VLANs) and the subscriber ports; said attributes including an identification of an S-VLAN through which

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the requested service is accessed and sends mapping control information to the traffic mapper, thereby enabling the traffic mapper to establish a service binding between the identified end-user device and the S- VLAN through which the requested service is accessed (Holmgren, col 1, ln 6-34, col 4, ln 39-50, col 5, ln 45-50). It is shown where a service is accessed through an S-VLAN, which is also shown to communicate through an Ethernet network to access Vans on a per port basis, and it is shown where the Ethernet network includes mapping a service to an address.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Owens and Holmgren because a way of conserving mapping assignments for internetworking Ethernet and ATM networks by mapping VLAN identifiers to PVCs.

As to claim 6, Owens and Holmgren define the Ethernet DSLAM of claim 5, wherein the service binding is established utilizing the IEEE802.1x protocol. From applicants specification IEEE802.1x is an integrated part of Windows XP operating system (Owens, par 0015). The paragraph shows using Windows operating system.

As to claim 7, Owens and Holmgren create the Ethernet DSLAM of claim 5, wherein the service binding is established utilizing the Point-to-Point Protocol over Ethernet (PPPoE) protocol (Owens, par 0008). It is shown utilizing Point-to-Point Protocol over

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Ethernet.

As to claim 8, Owens and Holmgren expose the Ethernet DSLAM of claim 5, further comprising a Dynamic Host Configuration Protocol (DHCP) server that answers DHCP requests sent by the identified end-user device prior to establishment of the service binding, said DHCP server sending a temporary configuration and a short lease time to the identified end-user device (par 0019, 0088, 0090). The paragraph shows using a DHCP server establishing a temporary configuration and having a lease time to authenticate a user.

As to claim 9, Owens and Holmgren explain the Ethernet DSLAM of claim 8, wherein the DHCP server ignores DHCP requests sent by the identified end-user device after establishment of the service binding, thereby forcing the end-user device to broadcast a DHCP discover message which is passed on to a second DHCP server in the through which the requested service is accessed (Owens, par 0055, 0063, 0065). The paragraphs show sending a broadcast of discover message by a DHCP server.

Owens fails to show using SVLAN. In analogous art Holmgren shows using SVLAN (Holmgren, col 4, ln 39-50, col 5, ln 45-50). It is shown where a service is accessed through an S-VLAN

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Owens and Holmgren because a way of conserving

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mapping assignments for internetworking Ethernet and ATM networks by mapping VLAN identifiers to PVCs.

As to claim 11, Claim 11 is a claim to a method to carry out the DSLAM of claim 2.

Therefore claim 11 is rejected under the same rationale set forth in claim 2.

As to claim 12, Claim 12 is a claim to a method to carry out the DSLAM of claim 2.

Therefore claim 12 is rejected under the same rationale set forth in claim 2.

As to claim 14, Claim 14 is a claim to a method to carry out the DSLAM of claim 5.

Therefore claim 14 is rejected under the same rationale set forth in claim 5.

As to claim 15, Claim 15 is a claim to a method to carry out the DSLAM of claim 6.

Therefore claim 15 is rejected under the same rationale set forth in claim 6.

As to claim 16, Claim 16 is a claim to a method to carry out the DSLAM of claim 7.

Therefore claim 16 is rejected under the same rationale set forth in claim 7.

As to claim 17, Claim 17 is a claim to a method to carry out the DSLAM of claim 8.

Therefore claim 17 is rejected under the same rationale set forth in claim 8.

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As to claim 18, Owens and Holmgren demonstrate the method of claim 14, further comprising the steps of: receiving by the Ethernet DSLAM, a Dynamic Host Configuration Protocol (DHCP) request from the identified end-user device; determining by the Ethernet DSLAM, whether the service binding has been established; upon determining that the service binding has not been established, sending an answer to the end-user device from a DHCP server in the Ethernet DSLAM (Owens, fig 1, par 0019, 0051, 0052, 0074). The paragraphs show using a DSLAM server to serve and receive DHCP request and determining that the service whether or not service has been established.

Owens show wherein the answer includes a temporary configuration and a short lease time; and upon determining that the service binding has been established, ignoring the DHCP request, thereby forcing the end-user device to broadcast a DHCP discover message which is passed on to a second DHCP server through which the requested service is accessed (par 0019, 0055, 0063, 0065, 0088, 0090). The paragraph shows using a DHCP server establishing a temporary configuration and having a lease time to authenticate a user, and sending a broadcast of discover message by a DHCP server

Owens fails to show using SVLAN. In analogous art Holmgren shows using SVLAN (Holmgren, col 4, ln 39-50, col 5, ln 45-50). It is shown where a service is accessed though an S-VLAN

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the invention it would have been obvious to one of ordinary skill in

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the art to combine the teachings of Owens and Holmgren because a way of conserving mapping assignments for internetworking Ethernet and ATM networks by mapping VLAN identifiers to PVCs.

Response to Arguments

- 1) Applicant argues the Applicant's invention solves a different problem. The Applicant's invention modifies the DSLAM in such a way that the BRAS is no longer needed for configuration of the service bindings. This eliminates several problems with the BRAS-based service binding procedure, which Owens does not solve or even address.

The examiner respectfully disagrees first the examiner would like note that the applicant claim does not state the DSLAM is modifies in such a way that the BRAS is no longer needed. The clam doesn't mention BRAS therefore the applicant's argument is moot. In (Owens, par 0081), the paragraph shows the BRAS receives the configuration details which are transmitted to the modem. The modem automatically configures the information itself.

- 2) Applicant argues Owens does not disclose or suggest a DSLAM that eliminates the need for a BRAS for configuration of the service bindings, as claimed by the Applicant. Therefore, the withdrawal of the § 102 rejection and the allowance of

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claim 1 are respectfully requested. Claim 4 depends from claim 1 and recites further limitations in combination with the novel elements of claim 1. Therefore, the allowance of claim 4 is respectfully requested. Independent claim 10 is a method claim corresponding to apparatus-type claim 1. Claim 10 recites steps that eliminate the need for a BRAS for configuration of the service bindings. Such a method is not taught or suggested by Owens, which concentrates on the DSL modem. Therefore, the withdrawal of the § 102 rejection and the allowance of claim 10 are respectfully requested. Claim 13 depends from claim 10 and recites further limitations in combination with the novel elements of claim 10. Therefore, the allowance of claim 13 is respectfully requested.

The examiner respectfully disagree DSLAM that eliminates the need for a BRAS for configuration of the service bindings is not claimed by the applicant this limitation is not present in the claims. In Owens (par 0006, 0012-0017, 0040), the paragraphs show bridging a terminal to PVCs to utilize upstream and downstream traffic.

- 3) Applicant argues the Examiner rejected claims 2, 3, 5-9, 11, 12, and 14-18 under 35 U.S.C. §103(a) as being unpatentable over Owens in view of Holmgren et al. (US 7,277,442). The Applicant respectfully submits that the claimed invention is also distinguishable over Owens and Holmgren for the reasons discussed above. As noted above, Owens concentrates on the DSL modem 104, and fails to disclose or suggest a DSLAM or method that eliminates the need for a BRAS for

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configuration of the service bindings. Holmgren is cited for showing that a requested service is accessed through an S-VLAN, and for showing that Ethernet includes means for mapping the S-VLAN to the address for the end user device. Like Owens, however, Holmgren also fails to disclose or suggest a DSLAM or method that achieves the result of the Applicant's claimed invention. Thus, Holmgren does not overcome the shortcomings of Owens, and the combination of Owens and Holmgren still does not disclose or suggest the DSLAM as claimed. Claims 2 and 3 depend from claim 1 and recite further limitations in combination with the novel and unobvious elements of claim 1. Therefore, the allowance of claims 2 and 3 is respectfully requested.

The examiner respectfully disagree DSLAM that eliminates the need for a BRAS for configuration of the service bindings is not claimed by the applicant this limitation is not present in the claims. In Owens (par 0006, 0012-0017, 0040), the paragraphs show bridging a terminal to PVCs to utilize upstream and downstream traffic.

- 4) Applicant argues independent claim 5 recites among other features, that the claimed DSLAM includes: a RADIUS client that sends login credentials and a service request from the identified end-user device to an external RADIUS server for authentication and receives from the external RADIUS server, a plurality of attributes for configuring the Ethernet DSLAM to provide a service binding

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corresponding to the requested service, Thus, the claimed DSLAM eliminates the need for a BRAS for configuration of the service bindings. This feature is not taught or suggested by the combination of Owens and Holmgren. Therefore, the withdrawal of the § 103 rejection and the allowance of claim 5 are respectfully requested. Claims 6-9 depend from claim 5 and recite further limitations in combination with the novel and unobvious elements of claim 5. Therefore, the allowance of claims 6-9 is respectfully requested.

The examiner respectfully disagree DSLAM that eliminates the need for a BRAS for configuration of the service bindings is not claimed by the applicant this limitation is not present in the claims. In Owens (par 0006, 0012-0017, 0040), the paragraphs show bridging a terminal to PVCs to utilize upstream and downstream traffic. Owens show a RADIUS client that sends login credentials and a service request from the identified end-user device to an external RADIUS server for authentication and receives from the external RADIUS server, a plurality of attributes for configuring the Ethernet DSLAM to provide a service binding corresponding to the requested service, and an identification of a Permanent Virtual Circuit (PVC) on a local DSL loop associated with the end-user device a Service Selection Controller that receives the attributes from the RADIUS client (par 0005, 0006, 0044, 0049, 0051). From the applicant's specification the service selection controller is located in side the DLSAM. The paragraph shows the

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authentication servers use Radius for communication and configuring and communicating with an Ethernet DSLAM to provide identification for PVCs on DSL.

- 5) The applicant argues Claims 11 and 12 depend from claim 10 and recite further limitations in combination with the novel and unobvious elements of claim 10. Therefore, the allowance of claims 11 and 12 is respectfully requested.
- Independent claim 14 recites among other steps: receiving from the external RADIUS server, a plurality of attributes for a service binding corresponding to the requested service, said attributes including an identification of a Service Virtual Local Area Network (S-VLAN) through which the requested service is accessed, and an identification of a Permanent Virtual Circuit (PVC) on a local DSL loop associated with the end-user device; configuring the Ethernet DSLAM to provide the service binding corresponding to the requested service; and Thus, in the claimed method, the DSLAM eliminates the need for a BRAS for configuration of the service bindings. This feature is not taught or suggested by the combination of Owens and Holmgren. Therefore, the withdrawal of the § 103 rejection and the allowance of claim 14 are respectfully requested. Claims 15-18 depend from claim 14 and recite further limitations in combination with the novel and unobvious elements of claim 14. Therefore, the allowance of claims 15-18 is respectfully requested.

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The examiner respectfully disagrees first the examiner would like note that the applicant claim does not state the DSLAM is modifies in such a way that the BRAS is no longer needed. The clam doesn't mention BRAS therefore the applicant's argument is moot. In (Owens, par 0081), the paragraph shows the BRAS receives the configuration details which are transmitted to the modem. The modem automatically configures the information itself.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Harley whose telephone number is (571)270-5435. The examiner can normally be reached on Monday- Friday 7:00 am-4:30pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jefferey Harold can be reached on (571)272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JH

/Jefferey F Harold/

Supervisory Patent Examiner, Art Unit 2468